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10/535,247	12/14/2005	Hirokazu Ooe	2936-0241PUS1	5978
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BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				CORMIER, DAVID G
ART UNIT		PAPER NUMBER		
1711				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/535,247	OOE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	DAVID CORMIER	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 15 December 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1,4,5,7,8,10 and 16-18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,4,5,7,8,10 and 16-18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

### **Response to Arguments/Amendments**

1. This Office action is responsive to the amendment filed on 15 December 2011. Claims 1, 4, 5, 7, 8, 10 and 16-18 are pending. Claim 17 has been amended, and Claim 18 is new.
2. Claims 1, 4, 5, 7, and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al. (JP 2001-276484), in view of Mueller et al. (US 5,504,955), in view of Kown (US 2002/0088061), in further view of Hashimoto (US 5,743,115). Applicant's arguments have been carefully considered, but they are unpersuasive.
3. First, Applicant argues that it is not obvious to have a predetermined process in a laundry washing session which is performed longer than in a case where no metals ions are added but a treatment substance is added. The Examiner respectfully disagrees and believes that in view of the cited art, this would have been obvious to try. MPEP 2143 – Obvious To Try. Ando discloses that silver ions may or may not be used, and Mueller discloses fabric softener (reads on a treatment substance) may or may not be used, it would have been obvious to one of ordinary skill in the art to have processes in which one of the silver ions or the softener is used. One of ordinary skill in the art would recognize that in the case of supplying ions, fabric softener, or a combination, the number of rinses or duration of rinsing for complete rinsing of the clothes could vary. There are three possibilities regarding the duration: the same rinsing time when using ions or fabric softener, longer rinsing with fabric softener, or shorter rinsing with fabric softener. Because of the limited possibilities, absent a demonstration of unexpected results or secondary considerations, it would have been obvious to try for one of ordinary skill in the art at the time of

Art Unit: 1711

the invention to vary the duration of rinsing such that the rinsing time is longer when metal ions are added than when no metal ions are added but treatment substance is added.

4. Second, Applicant argues that the spin dry rinse of Hashimoto does not correspond to the rinsing of the present invention. Applicant notes that the spin dry rinse of Hashimoto does not involve any period at all in which a water current occurs and thus does not correspond to the rinsing of the present invention. And furthermore, the rinsing of the present invention is for attaching metal ions or treatment substance to clothes, and Hashimoto is for extracting detergent from clothes. The Examiner respectfully disagrees with the interpretation of the claims in view of the art of record. Applicant does not explicitly claim a rinsing cycle or water currents, but rather a sequence of "swirl periods." This phrase is considered to be extremely broad and is broadly and reasonably equivalent to the rotating tub periods of Hashimoto (Figures 4a-4c). The claimed sequence of swirl periods does not exclude a spin dry step. Also note that both opening and closing the water supply valve would read on controlling the water flow controlling portion (Figure 4b), and "water currents" (which do not appear to be claimed) are generated in the clothes and in the tub even during spin drying extraction. The motivation for combining this rinse process is that this type of spin dry rinse would reduce the consumption of water in the rinsing cycle (col. 1, lines 31-34).

5. Claims 8, 10, and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al. (JP 2001-276484) in view of Hashimoto (US 5,743,115). Applicant's arguments have been carefully considered, but they are unpersuasive.

6. Applicant argues that the steps of Hashimoto (Figure 11, G15 and G16) are performed after a washing process (G3) and before a rinsing process (G19-G23), thus they are not

Art Unit: 1711

performed after a final rinsing as claimed in claim 8, and that the steps (G19-G23) of Hashimoto would drain off silver ions attached to the clothes as taught by Ando. It is first noted that Hashimoto is not relied upon for the rinsing process in steps G19-G23, therefore, the relevance of those steps is unclear. Ando discloses dehydration drying processes following washing processes and rinsing processes (machine translation, paragraphs 26-28), but does not expressly disclose correcting for unbalance during a squeezing process (which is a dehydration process). Hashimoto discloses a washing machine comprising: an unbalance detecting portion detecting unbalance in the washing tub (29), an unbalance correcting portion correcting the unbalance by agitating inside the washing tub (5), a controller that controls the washing machine (Figure 3). When an unbalance is detected during a spin drying step (Figure 11; G6), water is supplied (G15), and agitation is performed (G16). Therefore, Hashimoto discloses that water can be supplied, and the laundry agitated, as a means of correcting for an unbalance (the claimed “rinsing for correcting uneven spreading”).

7. The terminal disclaimer filed on December 15, 2010 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Co-pending Patent Application No. 10/550002 has been reviewed and is NOT accepted because the filing date for Co-pending Patent Application No. 10/550002 is incorrect. The filing date should be 9/23/05. Accordingly, the provisional rejection of Claims 8 and 10 on the ground of nonstatutory obviousness-type double patenting over claims 1, 3-5, 7, 8, 10 and 11 of copending Application No. 10/550002 is maintained.

8. The rejections are modified, and new ground(s) of rejection are presented, in response to the amendment.

### **Double Patenting**

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

10. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

11. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 8 and 10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-5, 7, 8, 10 and 11 of copending Application No. 10/550002. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are substantially identical to the copending claims, with the instant claims being broader in scope than the copending claims.

13. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### **Claim Rejections - 35 USC § 103**

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15. **Claims 1, 4, 5, 7, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al. (JP 2001-276484), in view of Mueller et al. (US 5,504,955), in view of Kown (US 2002/0088061), in further in view of Hashimoto (US 5,743,115).**

16. Regarding Claims 1, 7, and 16, Ando discloses a washer comprising: a washing tub (103); a metal ion adding portion adding antimicrobial metal ions to water in the washing tub (B); a water flow controlling portion controlling flow of water in the washing tub (110). Ando further discloses that a controller (240) controls the ion eluting device such that a voltage is applied to the device so that ions are added to the wash water during a rinse process (machine translation, paragraphs 4 and 25). Additionally, Ando discloses that in the case of someone having a silver allergy, the wash can be performed without addition of silver ion (machine translation, paragraphs 17-19).

Art Unit: 1711

17. Ando does not expressly disclose the treatment substance adding portion adding a treatment substance for washing to the water in the tub, the control unit controls the metal ion adding portion, the treatment substance adding portion, and the water controlling portion, the control unit is configured to measure time of duration of each period of a predetermined process in a laundry washing session, control, in the predetermined process at least one of the metal ion adding portion and the treatment substance adding portion so that at least one of the metal ions and the treatment substance is added to the water in the washing tub and attached to a surface of laundry.

18. Mueller discloses a washing machine having additive dispensers (50, 52, 54) for adding additives of various types, e.g., fabric softeners (col. 4, lines 12-31). Fabric softener may be added during the rinse cycle (col. 11, lines 11-22).

19. Because it is known in the art to an additive dispenser and to supply fabric softener to the laundry during rinsing if desired, and the results of the modification would be predictable, namely, an effective means of supplying fabric softener during rinsing for softening fabric, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a treatment substance adding portion, and to supply the treatment substance at least during rinsing if desired. Because Ando discloses that silver ions may or may not be used, and Mueller discloses fabric softener may or may not be used, it would have been obvious to one or ordinary skill in the art to have processes in which one of the silver ions or the softener is used.

20. Kown discloses a washing machine with a controller (100) controlling a functional water generator, detergent input part, and water supply valve, among others (Figure 6). The controller also measures the time of steps and controls the machine accordingly (paragraph 40).

Art Unit: 1711

21. Because it is known in the art to use a controller to control the washing cycle, and the results of the modification would be predictable, namely, an effective means of controlling all aspects of the washing process, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a controller measuring time of steps, and controlling the elements of the washing machine including the metal ion adding portion, treatment substance adding portion and water flow control portion.

22. Further, Ando does not expressly disclose the predetermined process including: first and second powerful swirl periods and a mild swirl period, or first and second powerful swirl periods and a still period, control the water flow controlling portion based on the measured time such that the mild swirl period or still period comes after the first power swirl period and the second powerful swirl period comes after the mild swirl period or still period, the second powerful swirl period being shorter than the first powerful swirl period, and control the water flow controlling portion based on the measured time such that the time of the predetermined process is longer when metal ions are added than when no metal ions are added but the treatment substance is added.

23. Hashimoto discloses a washing machine having a rinse mode having the following steps (abstract; Figure 4, Figure 5): a first powerful swirl period (Figure 4c, from 1-to-3 minutes at 1000 rpm) and a second powerful swirl period (Figure 4c, less than 1 minute in length at the 4 minute mark at 100 rpm), and a mild/still period in between (Figure 4c, that portion between the first and second powerful swirl periods). This type of spin dry rinse mode reduces the consumption of water in rinse cycles (col. 1, lines 31-34).

Art Unit: 1711

24. Because it is known in the art to have a predetermined rinse process having a first and second powerful swirl period and a still/mild swirl period, and the results of the modification would be predictable, namely, effectively rinsing clothes, while doing so economically, it would have been obvious to one of ordinary skill in the art at the time of the invention to have first and second powerful swirl periods and a mild/still period, the mild swirl period after a first powerful swirl period and before a second powerful swirl period, the second powerful swirl period shorter than the first powerful swirl period. One of ordinary skill in the art would also recognize that in the case of supplying ions, fabric softener, or a combination, the number of rinses or duration of rinsing for complete rinsing of the clothes could vary. There are three possibilities: the same rinsing time when using ions or fabric softener, longer rinsing with fabric softener, or shorter rinsing with fabric softener. It would have been obvious to try for one of ordinary skill in the art at the time of the invention to vary the duration of rinsing such that the rinsing time is longer when metal ions are added than when no metal ions are added but treatment substance is added.

MPEP 2143 - Obvious to Try.

25. Claims 4 and 5 are considered to be taught by Ando, in view of Mueller, in view of Kown, and further in view of Hashimoto as above.

26. Regarding Claim 4, Hashimoto discloses that when a “careful rinse” is selected, the controller follows a different path whereby the spin dry rinse times and spin dry times are fixed at a specific duration (Figure 12; col. 10, lines 8-33).

27. Regarding Claim 5, Hashimoto discloses in the normal operation of the machine (when “careful rinse” is not selected), the water level is set based on a detected laundry amount, and the

spin dry rinse times and spin dry times are varied accordingly (Figure 5; col. 5, line 53 to col. 6, line 25; note the ratio of times also changes depending on the laundry amount).

28. **Claims 8, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al. (JP 2001-276484) in view of Hashimoto (US 5,743,115).**

29. Regarding Claim 8, Ando discloses a washer comprising: a washing tub (103); a metal ion adding portion adding antimicrobial metal ions to water in the washing tub (B); a water flow controlling portion controlling flow of water in the washing tub (110). Ando further discloses that a controller (240) controls the ion eluting device such that a voltage is applied to the device so that ions are added to the wash water during a rinse process (machine translation, paragraphs 4 and 25). Additionally, Ando discloses that in the case of someone having a silver allergy, the wash can be performed without addition of silver ion, and if silver ions were applied, an indicator indicates that silver ion water was used (machine translation, paragraphs 17-19). Ando further discloses dehydration drying processes following washing processes and rinsing processes (machine translation, paragraphs 26-28).

30. Ando does not expressly disclose that the dehydration drying processes are by squeezing rotation of the washing tub; however, extraction of water by spinning (squeezing rotation) is extremely well-known and old in the washing machine art, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ando such that the dehydration drying processes are done by squeezing rotation, yielding the predictable result of effectively extracting water, soil, and detergent from clothes.

31. Ando does not expressly disclose an unbalance detecting portion detecting unbalance in the washing tub; an unbalance correcting portion correcting the unbalance by agitating inside the

Art Unit: 1711

washing tub; and a control unit that controls the metal ion adding portion and the unbalance correcting portion, wherein the control unit is configured to: detect whether the metal ions have been added to the water in the final rinsing before a squeezing process, and when the unbalance detecting portion detects unbalance in the washing tub during squeezing rotation of the washing tub performed thereafter, detect that the metal ions have been added in the final rinsing, control the unbalance correcting portion and the metal ion adding portion to execute rinsing for correcting uneven spreading of laundry in which, while water having the metal ions added thereto is supplied, agitation is performed.

32. Hashimoto discloses a washing machine comprising: an unbalance detecting portion detecting unbalance in the washing tub (29), an unbalance correcting portion correcting the unbalance by agitating inside the washing tub (5), a controller that controls the washing machine (Figure 3). When an unbalance is detected during a spin drying step (Figure 11; G6), water is supplied (G15), and agitation is performed (G16).

33. Because it is known in the art to rinse using silver ions, as taught by Ando, and to correct an unbalance by rinsing with water, as taught by Hashimoto, and the results of the modification would be predictable, namely, an effective means of correcting unbalance by rinsing and preserving sterilization function, it would have been obvious to one of ordinary skill in the art at the time of the invention to have an unbalance detecting portion, an unbalance correcting portion, and to correct unbalance during squeezing rotation by supplying water containing metal ions and agitating. Note that Ando appears to implicitly "detect" whether metal ions have been added for the indication function; nevertheless, because Ando teaches that knowing whether metal ions are

Art Unit: 1711

added or not can be important in the case of a user having a silver allergy, it would have been obvious to perform the step of "detecting whether metal ions are added..."

34. Regarding Claims 10 and 17, Ando in view of Hashimoto is relied upon as above. Ando in view of Hashimoto does not expressly disclose that when the rinsing for correcting uneven spreading of laundry is executed while the water having the metal ions added thereto is supplied, an amount of metal ions added is less than that added in previous processes. Ando does disclose that the electrolysis power between the silver electrodes can be varied to keep an antibacterial activity high by keeping the silver ion concentration over 3 ppb, while reducing discoloration of clothes by keeping the silver ion concentration below 50 ppb (machine translation, paragraphs 7, 13).

35. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify Ando in view of Hashimoto, and to lower, or reduce to zero, the quantity of metal ions in the step of rinsing for correcting uneven spreading of laundry, yielding the predictable result of preventing discoloration of laundry. Furthermore, because Ando discloses that the concentration of silver ions affects the antibacterial activity, the silver ion concentration is a result-effective variable, and it would have been obvious to optimize the silver ion concentration of the laundry by increasing or decreasing the silver ion concentration in subsequent rinses in order to maintain a high antibacterial activity. MPEP 2144.05 (B) - Optimization of Ranges (II). And furthermore, regarding Claim 17, it is extremely common and well-known to inform users of the operational status of the machine, therefore, it would have been obvious to indicate or notify that water having no metal ions is supplied. Further regarding claim 17, the phrase "to notify a user that expected antimicrobial effect may not be achieved" is

not a manipulative step. The manipulative step would be to control an informing portion to give an indication and/or notification that water having no metal ions is added. That this may cause a user to deduce/understand a less than expected antimicrobial effect is achieved is given little patentable weight.

36. **Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al. (JP 2001-276484), in view of Mueller et al. (US 5,504,955), in view of Kown (US 2002/0088061), in further in view of McAllister et al. (US 2003/0208855).**

37. Regarding Claims 18, Ando discloses a washer comprising: a washing tub (103); a metal ion adding portion adding antimicrobial metal ions to water in the washing tub (B); a water flow controlling portion controlling flow of water in the washing tub (110) and an agitator (104). Ando further discloses that a controller (240) controls the ion eluting device such that a voltage is applied to the device so that ions are added to the wash water during a rinse process (machine translation, paragraphs 4 and 25). Additionally, Ando discloses that in the case of someone having a silver allergy, the wash can be performed without addition of silver ion (machine translation, paragraphs 17-19). Ando further discloses dehydration drying processes following washing processes and rinsing processes (machine translation, paragraphs 26-28).

38. Ando does not expressly disclose the treatment substance adding portion adding a treatment substance for washing to the water in the tub, the control unit controls the metal ion adding portion, the treatment substance adding portion, and the water controlling portion, the control unit is configured to measure time of duration of each period of a predetermined process in a laundry washing session, control, in the predetermined process at least one of the metal ion adding portion and the treatment substance adding portion so that at least one of the metal ions

Art Unit: 1711

and the treatment substance is added to the water in the washing tub and attached to a surface of laundry.

39. Mueller discloses a washing machine having additive dispensers (50, 52, 54) for adding additives of various types, e.g., fabric softeners (col. 4, lines 12-31). Fabric softener may be added during the rinse cycle (col. 11, lines 11-22).

40. Because it is known in the art to an additive dispenser and to supply fabric softener to the laundry during rinsing if desired, and the results of the modification would be predictable, namely, an effective means of supplying fabric softener during rinsing for softening fabric, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a treatment substance adding portion, and to supply the treatment substance at least during rinsing if desired. Because Ando discloses that silver ions may or may not be used, and Mueller discloses fabric softener may or may not be used, it would have been obvious to one of ordinary skill in the art to have processes in which one of the silver ions or the softener is used.

41. Kown discloses a washing machine with a controller (100) controlling a functional water generator, detergent input part, and water supply valve, among others (Figure 6). The controller also measures the time of steps and controls the machine accordingly (paragraph 40).

42. Because it is known in the art to use a controller to control the washing cycle, and the results of the modification would be predictable, namely, an effective means of controlling all aspects of the washing process, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a controller measuring time of steps, and controlling the elements of the washing machine including the metal ion adding portion, treatment substance adding portion and water flow control portion.

Art Unit: 1711

43. Further, Ando does not expressly disclose the predetermined process including: first and second powerful swirl periods and a mild swirl period, or first and second powerful swirl periods and a still period, control the water flow controlling portion based on the measured time such that the mild swirl period or still period comes after the first power swirl period and the second powerful swirl period comes after the mild swirl period or still period, the second powerful swirl period being shorter than the first powerful swirl period, and control the water flow controlling portion based on the measured time such that the time of the predetermined process is longer when metal ions are added than when no metal ions are added but the treatment substance is added, wherein the predetermined process is performed with the laundry immersed in water inside the washing tub.

44. McAllister discloses a method for time-varying the agitator oscillation in an automatic washer (abstract). Water is supplied to the wash basket (42) to the clothes up to a level which exceeds the clothes level (paragraph 37). An impeller (40) is oscillated (alternately rotated in a first direction and then in a reverse direction, paragraph 38) such that the oscillation time varies randomly with each subsequent period (paragraphs 39-40; Figure 4). Figure 4 shows an example, in which an oscillation period changes from 0.4 seconds to 0.2 seconds, then to 0.6 seconds. In the example shown in Figure 4, the either/both positive and negative oscillations during the 0.4 second period would read on a first powerful swirl period, and either/both the positive and negative oscillations during the 0.2 second period would read on a shorter second powerful swirl period. The pause (at zero voltage) between the periods, or any time in which the agitator is decelerating or accelerating, such as during the transition from counterclockwise to

Art Unit: 1711

clockwise, would read on a mild or still swirl period (Figure 4). McAllister discloses that mechanical action inside the washing machine is enhanced using this method (paragraph 32).

45. Because it is known in the art to agitate laundry immersed in water using a first and second powerful swirl period and a still/mild swirl period, the second swirl period being shorter than the first swirl period, and the results of the modification would be predictable, namely, enhancing mechanical action to clothing during the rinsing step of Ando, it would have been obvious to one of ordinary skill in the art at the time of the invention to have first and second powerful swirl periods and a mild/still period, the mild swirl period after a first powerful swirl period and before a second powerful swirl period, the second powerful swirl period shorter than the first powerful swirl period while the laundry is immersed. One of ordinary skill in the art would also recognize that in the case of supplying ions, fabric softener, or a combination, the number of rinses or duration of rinsing for complete rinsing of the clothes could vary. There are three possibilities: the same rinsing time when using ions or fabric softener, longer rinsing with fabric softener, or shorter rinsing with fabric softener. It would have been obvious to try for one of ordinary skill in the art at the time of the invention to vary the duration of rinsing such that the rinsing time is longer when metal ions are added than when no metal ions are added but treatment substance is added. MPEP 2143 - Obvious to Try.

### Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CORMIER whose telephone number is (571) 270-7386. The examiner can normally be reached on Monday - Thursday 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/535,247  
Art Unit: 1711

Page 18

/Michael Barr/  
Supervisory Patent Examiner, Art Unit  
1711

/DGC/  
David Cormier  
2/23/2011